

IN DEFENSE OF SCIENCE AND TECHNOLOGY

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During the Friday evening of the seventh annual Humanist Weekend airing of modernist/postmodernist viewpoints, science and technology were criticized directly by some and indirectly by others. While science and technology are fair game, it is unfortunate that time was not available to rise in their defense. Love Canal and nuclear weapons were given as examples, as they frequently are. What many forget is that *science* is the *search for knowledge*, and *technology* is the *sum of the ways that society provides itself with the objects of civilization*.

To portray science or technology as villains ignores our own role in determining how their fruits are used. To the contrary, science and technology have not failed; they have been phenomenally successful.

The fault lies not with scientists, who are not insensitive to the fragrance and radiance of a rose, and to imply such is more than prejudicial. Again, to the contrary, many of the persons of science whom I have known are deeply attuned to the aesthetic nature of the world in general and of the subjects of their study in particular. To cast blame on science or technology is to join ranks with the hard-core religionists, the fundamentalists in particular, against whom science has fought a long and unrelenting battle, frequently at great cost.

No, science is not at fault, nor technology. The fault is ours. It belongs to those of us who treasure opinion more than knowledge. It belongs to those who use technology to garner profits regardless of the human and environmental costs. It belongs to churches that preach love and tolerate greed, and to the ignorant and indolent who read the sports and the funnies, but rely on astrology tables or the church to show them the way.

The famous physicist, Leo Szilard, fought against use of the atom bomb, cabling and sending memoranda to President Roosevelt, urging an international demonstration so that the Japanese could witness its power and surrender. But others, not scientists, determined that the bomb would be used for effect-and not as a mere demonstration.

As I looked about the meeting room at the 1992 Humanist Weekend conference, noting the average age of the participants, I calculated that were it not for science, many of us would not even be there, and most of the remainder, assailed with an assortment of pock marks, uncorrected vision, hearing loss and perhaps the occasional missing limb, would find it difficult to communicate our disdain for science, speaking, as we most certainly would, through the gaps between our painful, decaying teeth.

Jacob Bronowski, Humanist and *scientist*, will always be remembered by those who saw this gentle man in the stunning British Broadcasting Corporation's series, "The Ascent of Man." Near the end of the series he addressed the criticism that many so wrongly make of science: that it is dehumanizing and responsible for our ills.

In that scene, Bronowski slowly walked into an Auschwitz pond until its waters lapped over the tops of his polished shoes. He bent over, reached into the pond and brought up a fistful of verdant, sodden grass. Then, looking up into the cameras, he began:

It is said that science will dehumanize people and turn them into numbers. That is false, tragically false. Look for yourself. This is the concentration camp and crematorium at Auschwitz. *This* is where people were turned into numbers. Into this pond were flushed the ashes of some four million people. And that was not done by gas. It was done by *arrogance*. It was done by *dogma*. It was done by *ignorance*.

When people believe that they have absolute knowledge, *with no test in reality*, this is how they behave.